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Words on Wilderness, April 1989

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WORDS ON WILDERNESS

April/May 1989

THE NEWSLETTER OF THE WILDERNESS STUDIES AND INFORMATION CENTER

Rm 207 Forestry Bldg, U of MT, 59812 (243-5361) Editor: Glenda Wallace Asst. Editor: Anne Kazmierczak

A Study of the Opposition to Oil in the Arctic

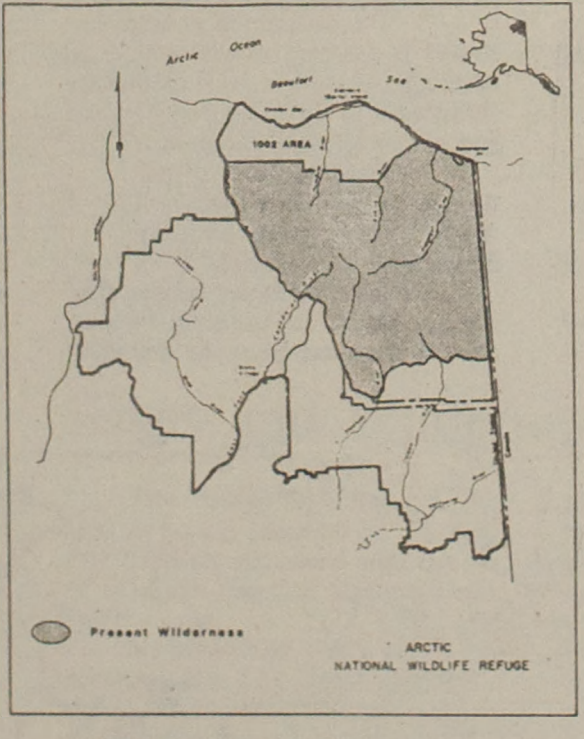
by Scott Luchessa

The catastrophic oil spill in Valdez, Alaska has again focused national and Congressional attention on the issue of gas and oil development in the Arctic National Wildlife Refuge (ANWR).

Opponents of this issue claim that the environmental record at Prudhoe Bay shows that the risks of exploration and development are not worth the potential oil and gas resources. In addition, they cite U.S. commitments to protect international resources and a basic incompatibility with the purpose of the ANWR as reasons why Congress should ban any oil or gas leasing in the coastal plain area of the 19 million acre refuge.

Section 1002 of the Alaska National Lands Interest Conservation Act, which established the ANWR in 1980, set aside 1.5 million acres of coastal plain (see 1002 Area on map) for study of fish and wildlife resources and potential oil and gas resources. The U.S. Fish and Wildlife Service (USFWS) is responsible for the management of national wildlife refuges. In April 1987, the USFWS in conjunction with other agencies, issued a final environmental impact statement and report to Congress. The report identifies various management alternatives and the implications of each on natural resources. Former Secretary of the Interior Donald Hodel recommended to Congress the full oil and gas leasing alternative.

Secretary Hodel's recommendation was founded largely on the premises that oil and gas exploration can proceed in an environmentally sound manner and that the potential reserves in the 1002 Area could protect national security and reduce U.S. dependence on foreign oil. However, opponents maintain that the USFWS report and the environmental record at Prudhoe Bay failed to corroborate these premises.



A USFWS study at Prudhoe Bay found that reserve pit fluids (e.g drilling muds, cuttings and other contaminants) have adversely affected pond ecosystems. Oil was discovered at Prudhoe in 1968 and direct discharge of these contaminants was unregulated prior to 1983. Specifically, the study found that heavy metals and hydrocarbons from these reserve pits have significantly reduced aquatic invertebrate diversity and numbers in receiving ponds and connected waters. Hundreds of thousands of migratory birds, which use the Alaska's coastal plain for nesting, breeding and feeding, depend on protein-rich aquatic invertebrates.

Other direct impacts of exploration and development documented at Prudhoe Bay include the adverse effect of constructing roads, gravel pads and other support facilities. The study showed these activities altered normal drainage patterns, caused extensive flooding, accelerated erosion and induced unnatural thawing of the permafrost. The USFWS reported that more than 11,000 acres of vegetation has been destroyed by the direct impact of oil and gas development. Ecologists suggest that the cumulative effects of these activities may not be known for years.

Opponents claim the existing fish and wildlife resources of the coastal plain area are not worth risking for the probable fossil fuels beneath the permafrost. The average estimate of economically recoverable oil is 3.2 billion barrels, which would supply only four percent of domestic energy needs at maximum production. Energy experts have shown that the country could save 1.9 million barrels per day by raising new automobile fuel efficiency standards, something

Continued on page 8

The World is Waking up to Reforestation Challenge

by Jennifer Isern

While chilling and ominous reports of global deforestation continue, there is hope for the future. In recent years, a few international organizations have experimented with reforestation projects. Although it's too soon to determine whether these projects will be successful, the fact that governments are finally beginning to address the topic is a step in the right direction.

The rapid destruction of tropical forests is one of the most serious environmental threats of modern times. The intrinsic value of tropical forests is beyond measure. These forests, covering only six percent of the earth's land surface, contain about one-half of the world's estimated ten million species of plants and animals. They generate the global supply of oxygen; are the richest source of raw materials for agriculture and medicines; yield many products of industrial value; and provide a unique laboratory for scientists.

Even though these tropical forests appear rugged and dangerous, they are characterized as complex and fragile ecosystems with a web of interlocking relationships between diverse plant and animal species and their inorganic environment. In developing countries, such as Costa Rica, tropical deforestation devastates food production, fuelwood and fodder supplies, soil fertility and water resources. This serves to undermine the existing agriculture in these countries, exacerbates rural poverty, and contributes to the cultural genocide of indigenous populations.

Specifically:

* More than half of the world's tropical forests have disappeared since the turn of the century.
* The currest rate of deforestation exceeds forty million acres per year.
* The existence of two hundred million forest dwellers is threatened.
* Developing country imports of forest products exceed $10 billion.
* The destruction of tropical forests is resulting in widespread loos of unique ecosystems, which directly contributes to the extinction of plant and animal genetic resources.
* More than half of the developing world's population live in the 56 countries most critically affected by deforestation.
* Some scientists believe that tropical forests are too complex and diverse to regenerate or be managed on a sustained yield basis. Thus, much of the tropical forest destruction is considered irreversible.

But finally there is worldwide recognition that tropical forest destruction is an urgent global problem that requires not only conservation efforts in tropical countries, but international action and assistance. In 1985 an experimental reforestation project called MADELENA was created and funded by the U.S. Agency for International Development (AID) and the Regional Office for Central America and Panama (ROCAP). MADELENA builds upon the information and experiences of LENA, a previous AID-ROCAP project in existence from 1979 to 1985. LENA promoted fuelwood development and alternative energy souces. Using these LENA goals, MADELENA also incorporates the promotion of producing multiple-use trees.

The purposes of MADELENA are to develop and strengthen forestry programs and educational institutions and to research and disseminate on-farm, market-oriented tree-cropping technologies. The project design involves three prinicpal components: silvicultural and socioeconomic research on multipurpose tree species; information dissemination including support for extension programs and increased public awareness of the benefits of multipurpose tree-crop production; and technical training at the Master's level for vocational technical staff and specialized short-term training. In short, MADELENA shows a commitment to strengthening local institutions and increasing the awareness of the benefits of reforestation.

The Tropical Agriculture Research and Training Center in Turrialba,

RAINFORESTS OF THE WORLD

* * *

Costa Rica, administers MADELENA with close collaboration with national agencies in Costa Rica, El Salvador, Guatemala, Honduras, and Panama.

Costa Rica boasts one of the most stable governments in Latin America, yet the shadow of debt leaves the country's economy hamstrung. The country has become a high pressure arena for developers and conservationists waging war over the precious resource of tropical forests. Currently, Costa Rica has one of the highest rates of tropical deforestation, and at the same time, it has the best record on conservation of any country in Latin America.

Most important of all, Costa Rica offers an ideal combination of factors that create a suitable research environment:

* Despite its small size, Costa Rica is noted for tremendously diverse plant and animal species.

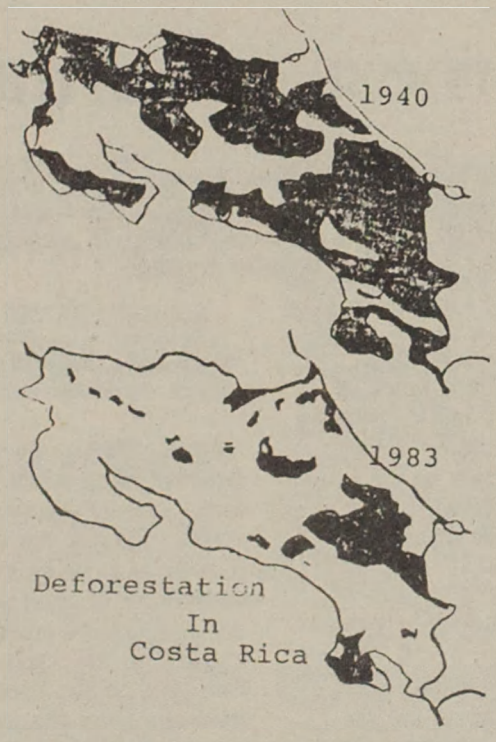
* Many international organizations and non-governmental organizations have offices, including field labs and research institutes, in Costa Rica, where many of the latest discoveries about tropical forests are taking place.

* Costa Rica's political system, a social democracy, is unique in Latin America.

* The government supports conservation and establishment of national parks.

* Costa Rica aggressively promotes tourism to finance the preservation of tropical forests--this is a new development internationally and serves as an international model.

Goals like these in Costa Rica, projects such as MADELENA and governmental policies are the genesis of responsible environmental action.



The benefits of the continuation, imitation and expansion of such insightful efforts are incalculable.

[Jennifer Isern is a UM senior in Political Science. As a 1989 Watkins Scholarship Recipient, she is completing a senior study thesis on the deforestation crisis and the reforestation challenge. Her study focuses on Costa Rica. She spent three weeks of observation and research in that country last December.]

Helping Wildlife Remain Wildlife

We can directly help wildlife in many ways, a few of which are common sense approaches.

Don't harrass wildlife by getting too close. Instead, use binoculars, spotting scopes, or a telephoto lens on your camera.

Leave young animals alone; their mothers are nearby. Once handled, reintroduction of the animal to the wild is almost impossible, and its chance of survival is reduced. Don't feed wild animals.

And please dispose of all garbage properly. Pick up your litter as well as any other litter you see. In addition to being unnatural and unsightly, some kinds of litter, like plastic six-pak containers and styro-foam, present a hazard to wildlife.

- Forest Service

Bikes and Wilderness are Illegal Mix

Now that spring is here, it is time to review some of the concerns and solutions associated with the use of mountain bikes on National Forest lands.

Mountain bike riders are reminded that it is illegal to ride within Wilderness. Unfortunately, many bikers don't realize this, and getting caught can result in a fine.

The reason for this closure is reflected in the congressional definition of Wilderness in the original Wilderness Act. The act states that there shall be no form of mechanical transport within these special undeveloped roadless areas.

Never ride a trail that crosses or goes into the Wilderness, and never continue with your bicycle beyond the Wilderness boundary. It is good practice to contact the local ranger station ahead of time to determine any area restrictions. It's a matter of common courtesy to follow a few guidelines on trails outside of Wilderness in an effort to prevent conflict.

The following are examples of suggested guidelines.

* Stop your bicycle, dismount, and allow hikers to pass.

* When encountering horses, move downhill of the trail; talk in low voices.

* Ride at speeds that allow for quick, safe stops.

* To prevent erosion never shortcut switchbacks or ride across vegetation off the trail.

*** Wilderness Journal ***

These excerpts called "Thinking While Scouting a Trapline Location" come from the 1983 journal of William R. (Bud) Moore, a native Montanan who retired from the Forest Service in 1974. Since leaving the Service, Bud and his wife, Janet, have built a log homestead on 80 acres in the Swan Valley. In addition to homesteading and managing his forest lands, Bud is a free-lance writer and lecturer on outdoor activities.

Aug. 4, 1983 -- My campsite is on a high sandbar created by flood waters in springtime. Since much of my gear was wet from last night's rain, I laid everything out in the sun to dry. I felt weary so I sat on a rock and ate some gorp and watched and listened to the Little Salmon Creek go tumbling past. The browns, pinks, greens, and greys of its argillite bed shone through the clear water. Then I went down with my cup and drank. I turned over a submerged stone and saw a large hellgrammite crawl to security beneath another. Given food like that, fish should be fat.

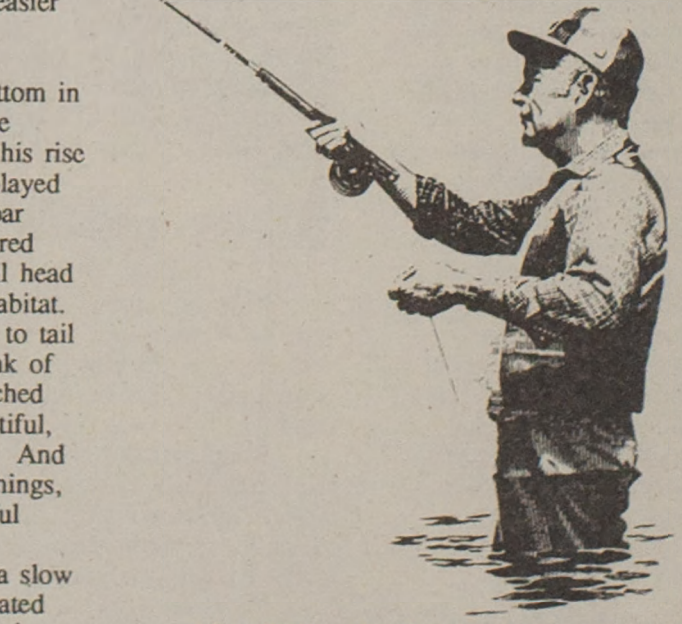
Thunder rumbled from clouds. Anticipating the usual afternoon showers, I pitched my tent on the bar and prepared a fireplace, using the rocks scattered along the stream. Then I assembled my fly rod and approached the stream with fish and green beans and hot tea in mind for supper. The rapids in front of camp connected fine pools above and below, so I walked to the tail of the nearest pool and began casting upstream then stripping slack through the guide with my left hand as the Sandy Mite fly floated towards me. Cutthroats like to spot food drifting down in time to rise up and meet the bug on the surface. Thus, it is easier to stalk from downstream a trout who is looking upstream for his dinner to come floating down.

About mid-pool a fine trout rose from the bottom in perfect timing to meet my fly. He seized the mite firmly and I set the hook with timing as good as his rise through the clear water. He was heavy. And I played him carefully before skidding him on to the sandbar where he flapped in the sun among the multi-colored stones. He measured 13 inches long and his small head and thick body demonstrated the richness of his habitat. I knew that he'd taste good. Speckled from head to tail with black spots the size of bird shot, the pale pink of his belly and crimson slash of his gill covers matched the rocks of the gravel bar. The stream was beautiful, the bar was beautiful and that trout was beautiful. And to share in such remarkable composition of wild things, once taken for granted, is today a rare and beautiful privilege.

I cooked the dehydrated beans and trout over a slow fire of spruce and alder while a companion pot heated water for brewing tea. The pink meat was so rich in flavor that it would be impossible for me to think of a finer entree in a more inspiring place. Blue wood smoke drifted from the fire out over the rapid. I tarried over tea, thinking, soaking in the spirit of the time and place where it was good to be alone in the heart of the Flathead's mountains.

The sun vanished as thunder rumbled and rain began to fail. I grabbed my scattered gear and tucked it in the tent, thankful that I had had foresight to erect the shelter while the sun still shone.

Aug. 6, 1983 -- At 9:15 a.m. I packed the malamutes and left camp headed up the Little Salmon drainage. At Gill Creek I bushwhacked along the Little Salmon in search of a site for my winter headquarters. The whole bottom is a spruce swamp laced with windfalls and snowbrush; a good place for marten but a poor place to camp in winter or any other time for that matter. So I climbed to the north, up Palisade Creek, and found a fine spot on the Creek's east side about 1/8 mile upstream from the trail crossing. Trouble is, a big elk runway crossed there too, and I disliked disrupting their years of travel with a camp. Lower down and nearer the trail, I found another bench on the mountain side that made a good location. There's plenty of dry wood nearby and a fair supply of dead poles. A shelf leads from the bench to a pool at the base of one of Palisade Creek's many cascades so water is handy. Though close to the trail, the camp will be hidden from travelers and thus present little, if any, impact on users of wilderness.



After finding the site, I hiked on through dense spruce and alpine fir forests to the first avalanche path coming in from the north and where I found a campsite at a small meadow near the foot of the slide. There was a big mule deer there and as she made off I got to thinking how important wilderness is to keep wild things from becoming domesticated. Even the deer, elk and bear out in the settled and roaded valleys are, in a sense, domesticated. They get so used to cars passing that

* * *

are easily shot from a road. The bears eat garbage and the deer and elk eat hay. They are different animals than the doe I disturbed from my campsite. Wild things are important and here in wilderness they have the opportunity to remain truly wild.

Man, like once-wild creatures, is also domesticated by the technological age, and the wilderness is important in keeping him aware of the closeness of his dependency to the natural earth.

Aug 7, 1983 -- I have eaten breakfast and am savoring black coffee as I write...

Because I camped on the east side of the avalanche path, the sun has not yet reached my camp, though it shines on almost the entire slide area. Had I found a spot on the west border of the slide, my tent would be dry, I could move through the grass without getting wet, and the sun would be transmitting cheer to my heart and strength to my body. When taking up with the natural earth, camp location, the availability of light and sun, water, wood and flat ground, are far more important than when a society of convenience protects its people from the elements, both the positive and negative kind.

That's what I mean by domestication of the human race. Domestication is a good thing, even necessary so long as people perceive the whole natural cycle and realize we, no matter the design and color of our walls and roof, are individually and collectively dependent on the wholesomeness of earth.

There are, however, many people born and grown whose entire focus in life is on the conveniences provided by technology, and how these people live and what they do with their lives is, in a way, dictated by industry, advertisement and government. They are vulnerable to capture by interests whose objectives are primarily economical and could become and sometimes do become pawns in the scheme to maximize government and corporate profits, often at the expense of the earth upon which our lives and our species depends. Once hooked on the syndrome that more convenience and more powerful things are better, then it is easy to see the earth solely as a place to cut, shoot or dig things needed to further the pursuit of material possessions.

Yet one could study this avalanche path with its surrounding mountains and forests and, because so many other values are obvious, it would take a long time for any commercial thought to enter the pilgrim's mind. What thought would disclose quickly is that here in wildness is the place to come from time to time to be sure that we do not succumb to over-indulgence in material possessions at the expense of the health of the earth. As long as we'll buy, someone will extract, manufacture and sell. But exposure to pristine places like this is sure to remind any thoughtful person where our roots are, and further, that we, individually and collectively, are responsible to perpetuate and care for the land and its resources.

And part of that care is to think hard about the source of its contents whenever we purchase another convenience to put in our lives or our homes. First of all, do we truly need it? Second, what is it made of and how has its creation affected the earth's resources? And, third, if we do not know then how can we find out? Beyond that, a trip to the wilderness now and then might be a good way to balance the use of things in our daily lives with the potential of the earth to sustain resources required for their manufacture.

The climb towards the Smith Creek Pass was hot but the dogs and I held up well. From the top of the switchbacks, I followed an old trail down to the second lake in the basin above the falls of the Little Salmon to find it fed by a large spring near the outlet with a brisk waterfall tumbling from the cliffs across the lake. Since the mosquitos seemed numerous and hungry, I camped on a point above the lake.

This lake and its environs are a fairy land surrounded by treeless mountains. There is a small island forested with whitebark pine, and pigmy trees grow from rocks sticking out of the water. The place is full of rocky nooks and crannies shaded by gnarled whitebark pine, alpine fir and spruce. I photographed the wonders then swam in a bay of the lake to find the water's temperature tolerable at the surface but cold down below. I began exploring the north bay but a great weariness came on and I realized I hadn't eaten since breakfast, even forgot to bring the sandwiches I had made from left-over bacon.

So I returned to camp and cooked a freeze-dried stew and flavored it with onions pulled from the meadow. Darkness settled with absolute stillness save the rumble of the waterfall. The scraping of my pencil seemed the loudest noise in the basin. The big peaks reflected in the green waters. I absorbed the wildness. This place was made to be visited by one at a time or perhaps one and someone he or she cares deeply for. It is no place for a large family gathering, just one or two and the mountains and the spell of wildness on the land.

Aug 8, 1983 -- As I climbed from the lake towards Smith Creek Pass, I got to thinking of the people I've known who seem to have lost track of, or perhaps never found, the basic principles of living, and further, how society protects and in some ways encourages neurosis. The alcoholic in a drunken stupor can set fire to his bed, yet be saved by the Fire Department and furnished treatment centers for possible cure. Those who shrink from accountability can escape reality by popping a pill and thereby support one of the largest industries on earth. The thief can steal and vanish into the crowd to steal again and again. None of these people could survive in the wilderness. They have to have the convenience and protection of the technological age and that age seems to have no alternative but to carry on the trend.

Unless, that is, enough thoughtful visitors take the lessons from wilderness and put them to work in our rural-urban society.

After Forest Wildfire, then what? .... Masses of Flowers!

by Peter Stickney

The aftermath of a severe or "hot" forest wildfire such as many of those that burned last summer, is not all ashes, char, and eternal desolation. While the general perception may be that tree-killing fires are an unmitigated disaster that destroys the forest, in reality the opposite is true.

Severe fire alters rather than destroys the forest community, making it unhabitable for some organisms such as dwarf mistletoe and bark beetles. And at the same time it serves as a rejuvenating and regenerating force creating a habitable site for a distinctive group of plants and animals (including insects, mosses, and fungi) that flourish best in an early postfire environment. A large number of plants in the Northern Rocky Mountains, up to 70 percent of the plant species in some forests, are well adapted to survive severe burning.

An examination of all the plants emerging from the ashes and char in a year-old burned forest would reveal that each green shoot arises either as regrowth from a rootcrown or underground stem or as a newly germinated seedling. The regrowths are survivors of plants growing in the forest at the time of the fire. The seedlings are colonizers that germinate from seeds stored in the ground, in the cones of fire-killed trees, or from seeds that have dispersed from unburned areas.

A newly burned forest is a unique place at a unique time in the cycle of forest succession. For plants such as snowbrush and wildflowers dragonhead and wild hollyhock, the first year after the fire is the only time their seedlings may be seen during an entire 100-300 year succession cycle. This first year is also the best time for the establishment of shade-intolerant, often commercially important, conifer tree seedlings.

One of the more interesting and attractive events resulting from fire is mass-flowering, a phenomenon where all plants of one species flower simultaneously. Without the conditions created by fire, mass-flowering of some herb and shrub species would never take place. With mass-flowering, an entire mountainside may burst into color against the blackened snags with sheets of yellow arnica, rose-purple fireweed, pink wild hollyhock, lavender-blue aster, purple lupine, white spirea, or straw-colored pinegrass.

For some plant species, mass-flowering occurs only once during the succession cycle. If you are not at the right place at the right time you miss the spectacle until the next fire comes along.

Mass-flowering for the short-lived annual geranium and biennial dragonhead is a singular event after which all plants die and the species disappear from the site. With the longer-lived perennials such as arnica, pinegrass, and spirea, mass-flowering occurs only once shortly after the fire, usually in the second year. For perennials like fireweed and wild hollyhock, mass-flowering occurs several times early in succession with fireweed starting as early as the first year.

Fire has long been an integral and natural force of disturbance to our coniferous forests. As a result it creates conditions favorable, even vital, to the regeneration and establishment of a specific group of herbs, shrubs, and trees. Many others are adapted to survive fires's periodic alterations of the forest community. The continued presence of fire is required to ensure and maintain the biological diversity associated with the broad range of forest types inhabiting the Northern Rocky Mountains.

Those interested in this postfire phenomenon should look for mass-flowering in burned forests at mid to lower elevations in the mountains of Montana during mid-June and July of the first and second years after the fire. The occurrence and extent of most mass-flowerings depend upon the presence and abundance of the species in the unburned forest at the time of the fire. If you are aware of sites where arnica, lupine, or other plants mentioned above were abundant in the forest before the fire, these are the places to particularly watch.

[Peter Stickney is a range scientist at the Intermountain Research Station's Forest Science Laboratory on the University of Montana campus.]

Health Department Issues Warning

Hikers, beware: It's tick season again.

The Missoula City-County Health Department has received its first reports of ticks and is urging people to take precautions.

Ticks generally are active from early spring through the first hot weather and are most common in tall grass or brush. They grip twigs or grass stems with two of their hind legs while their other legs grasp anything in reach -- including people and pets.

Rocky Mountain wood ticks transmit several diseases, but Rocky Mountain spotted fever is the one of most concern. Up to 3 percent of these ticks may carry the micro-organism that causes the disease.

Symptoms usually start about 14 days after a person has been exposed to the ticks. The first sign usually is a sudden, high fever. Deep muscle pain, severe headache, chills and pains in the eyes also are symptoms. A rash begins about three days after symptoms first start. Don't wait for the rash, warns Greg Oliver of the Health Department. Medical attention should be sought as soon as the fevers and headaches begin. Rocky Mountain spotted fever can be fatal if left untreated by antibiotics.

Among suggestions from the Health Department:

* When walking in the woods, wear clothing that fits snugly around the ankles, wrists and waist. Avoid shorts or short sleeves.

* Examine yourself and your children frequently to find and remove ticks. Check pets, too. Ticks can latch on to them and be carried into the house. Ticks usually wander around the body several hours before attaching and feeding.

* If a tick is found, remove it immediately. Don't crush it: fluids or tissues from a tick can contaminate the wound and cause infection. Ticks can be removed with fingers, but it is safer to protect your hands by using tweezers, gloves, paper or cloth. Grasp a tick as close as possible. A slow and steady pull is best since parts can break off and remain embedded in the skin.

* After the tick has been removed, wash the bite area with running water, paint the area with iodine or another antiseptic, and wash hands, tweezers and gloves.

* Write down the date you were exposed--there's no need to save the tick for testing. See a physician without delay if you experience a fever with a severe headache or a rash within 14 days.

[Reprinted with permission from the Missoulian.]

Eagle Dream

I. A golden eagle in my dreams circles down to my upheld hand,
Sits sentinel with me, as a soul long known here
in the ghost world or in the hard lands.
We gaze at the day enacted against a mountain panorama;
that is the backdrop of my dream.

We see seven sparrow-borne Spirits of Light
rise up from the foothills' thick grassy fields,
A dawn constellation of feathery brown guards
tracking home with our mortal small wishes.

We see grand hawks in snowy-grey robes,
trim their muscly fine flight to the purpling sun's rise.
Honor-sworn to the eagle-filled court that holds
sway over Creation's woods, seas and skies.

We watch as translucent white-china wingeds,
fly swiftly through airy stone mountains,
As if they were mere moments and mists,
Cream clouds through which they effortlessly pass.

And all throughout this eagle's dream,
I hear a steady song like running streams-
The complete feathered chorale forever proclaims
to the Maker of sky and woods' domain:
Thank you for the blue, the green, the grey, and white;
The moon, the stars, the sun, and night.

II. I'm flushed from my daydreams as eight grouse
boom off from the brush in two bands of four,
Down by the Sapphire's South valley floor,
The sunset's cloud robe is set bright afire
by billows of hot dust kicked up in the West.

III. Jangling their fearless loud caws,
Two jays sail down the wooded halls of gathering storms
Precursors to the soft, steady rain,
They loudly demand, brashly declare
the need to renew these high drought-scorned plains
and the mountainsides parched by the brittling winds.

Now, the season may come, the rains can begin;
The intent of the sky rhymes the wish of the land.
Now, the birds may take flight,
while the drenched Autumn trees
shed each leaf, and draw in.

- Charles Peltosalo

Wild Events Calendar

April 17-22	***Small World Festival*** at the University of Montana. Contact Environmental Studies or the Ecology Center for more information.
	Centennial Lecture Series:
April 20 & 21	Role of Wolves in Limiting Ungulate Population A.T. Bergenid, University of Victoria
May 11 & 12	Role of Habitat, Weather and Wolves in Limiting Ungulate Population R.O. Peterson, Michigan Technical University
May 18 & 19	Estimating the Population of Ungulates L.L. Eberhardt, Battelle Memorial Institute

General public welcome to hour-long lectures on Thursday evenings at 8 p.m. Location variable: contact Wildlife Biology. Technical lectures are offered on Friday at 11 a.m. in Forestry 206.

Oil in the Artic...

Continued from page 1

the Reagan administration refused to do. With continued production and transportation of fossil fuels there is a constant risk of spills.

According to the records of the Alaska Department of Environmental Conservation (ADEC), in 1985 "there were 521 reported spills of diesel and crude oil totalling 82,216 gallons in the Prudhoe Bay area." The draft environmental impact statement indicated that 23,000 spills had occurred, but the oil industry contested the number saying it was erroneously attributed to the Prudhoe region alone. ADEC advised that the disputed figure be removed from the final report because verification would require an extensive search through their records. Of the 521 spills contained in the final report, one percent were less than ten gallons, but spills of at least 10,000 gallons have occurred. Tank overtopping, leaks and ruptured lines were the most common cause of spills.

The USFWS report also indicated that full oil and gas leasing is expected to have minor to major impacts on fish and wildlife species. Of international interest are the Porcupine Caribou Herd (PCH), snow geese and the polar bear. According to the report, the PCH could lose or be displaced from critical habitat. This could result in a significant reduction in the population, which is tremendously important to the subsistence needs of peoples in both Canada and Alaska. In recognition of the special importance of this resource, the U.S. and Canada signed the Porcupine Caribou Management Agreement in December 1986.

Similarly, the U.S. has entered into agreements with Canada on the conservation of snow geese (1986) and polar bears (1976). The importance of the Wildlife Refuge's coastal plain to both species is documented in the USFWS report. Consequently, opponents say a commitment to oil and gas development activity would be a violation of those agreements.

Further, they point out that Congress created the ANWR to protect fish and wildlife populations and their habitat, to fulfill international treaty obligations and to provide continued subsistence uses by local residents.

Considering the evidence and global environmental problems like the greenhouse effect and acid deposition, opponents state that a recommendation to Congress to open the ANWR coastal plain to development would be inconsistent with already stated obligations and could be detrimental to the nation's diplomatic relations and credibility with Canada and other countries.

[Scott Luchessa is a graduate student in the environmental studies program at UM. From 1985 to 1987 he worked on the North Slope in Alaska on a Department of Energy study investigating the response of arctic vegetation to disturbance.]

Words on Wilderness wants your input! We need wilderness graphics, poems, short stories, feature articles, and our reader's opinions and suggestions. If you would like to contribute, contact: Editor, Words on Wilderness, Department of Forestry (room 207), University of Montana, Missoula, MT 59801 or call (406) 243-5361. We look forward to hearing from you!

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